Filed:

Amdt. dated 12/30/2004

Amendments to the Claims:

1-27. (Canceled)

28. (New) A bending press for forming workpieces of sheet metal, comprising:

first and second press beams that are displaceable relative to one another by means of a drive mechanism, each press beam supporting a variable number of bending tools that collectively define a required tool length extending along each press beam;

a control device connected to the drive mechanism for regulating the operating behavior of the bending press as a function of states detected by sensors, manual control commands and/or specifications stored in a memory device;

wherein the bending tools have at least machine-readable codes in the form of electronically detectable information carriers for identifying each bending tool and/or detecting a position of each bending tool on an at least partially automated basis;

an electronic detection device connected to the control device and operable to detect a plurality of information carriers; and

at least one displacement mechanism that extends parallel with the tool length and accommodates the detection device such that the detection device is displaceable along the tool length so that the codes of a plurality of information carriers are detected in sequence during a relative displacement of the detection device along the displacement mechanism and are transmitted to the control device, wherein the displacement mechanism for the detection device is recessed in a press beam or in a press table or is at least partially integrated therein.

- 29. (New) The bending press as claimed in claim 28, wherein the displacement mechanism is disposed in a groove-shaped recess in a tool holder mechanism and the recess extends into the press beam and into a table top of the press table.
- 30. (New) The bending press as claimed in claim 29, wherein the recess extends approximately across the maximum possible tool length.

Filed:

Amdt. dated 12/30/2004

31. (New) The bending press as claimed in claim 29, wherein a hollow compartment closed towards the outside is provided in the press beam and in the press table and the displacement mechanism is disposed in the hollow compartment.

- 32. (New) The bending press as claimed in claim 31, wherein a plate-type cover element is provided between the hollow compartment and the groove-shaped recess in the tool holder mechanism.
- 33. (New) The bending press as claimed in claim 28, wherein the detection device is coupled with the control device via a line connection so as to transmit signals.
- 34. (New) The bending press as claimed in claim 33, wherein the line connection is provided in the form of a trailing cable system disposed within a displacement range of the detection device.
- 35. (New) The bending press as claimed in claim 28, wherein a maximum detection distance between the detection device and an information carrier of an adjacent bending tool is shorter than a smallest possible distance between two information carriers of bending tools lined up in a row adjacent to one another without any gap therebetween.
- 36. (New) The bending press as claimed in claim 28, wherein the displacement mechanism is a flexible transport element to which the detection device is attached.
- 37. (New) The bending press as claimed in claim 36, wherein the flexible transport element is guided around two mutually spaced pulley blocks or winding spools.
- 38. (New) The bending press as claimed in claim 28, wherein the displacement mechanism has a guide element with a guide carriage relatively displaceable thereto, on which the detection device is disposed.

Filed:

Amdt. dated 12/30/2004

39. (New) The bending press as claimed in claim 28, wherein the displacement mechanism has a displacement drive connected to the control device.

40. (New) The bending press as claimed in claim 39, wherein the displacement drive is operable to be reversed in direction of rotation or motion.

41. (New) The bending press as claimed in claim 28, wherein the information carriers comprise transponders that are operable to be detected contactlessly or without being touched.

42. (New) The bending press as claimed in claim 41, wherein the transponders are arranged to operate without batteries.

43. (New) The bending press as claimed in claim 41, wherein the transponders are operable to be inductively or electromagnetically coupled with the detection device via corresponding transmitter and/or receiver devices for electromagnetic waves.

44. (New) The bending press as claimed in claim 28, wherein the detection device is operable to read from and write to a non-volatile memory device of the information carriers.

45. (New) The bending press as claimed in claim 28, wherein the information carriers have a passive position detection element.

46. (New) The bending press as claimed in claim 45, wherein the position detection element comprises a metal element on the information carrier.

47. (New) The bending press as claimed in claim 28, wherein the detection device has an inductive sensor for detecting a metal element on or in the region of an information carrier.

Filed:

Amdt. dated 12/30/2004

48. (New) The bending press as claimed in claim 28, further comprising a distance measuring device that measures the displacement path travelled by the detection device.

49. (New) The bending press as claimed in claim 28, wherein the displacement mechanism is a displacement drive and has a stepper motor connected to the control device for determining the displacement path and/or controlling the displacement path.

50. (New) The bending press as claimed in claim 36, wherein the flexible transport element has at least one electric conductor track that has an electrical connection to the detection device.

- 51. (New) The bending press as claimed in claim 50, wherein the conductor track on the transport element is connected to a stationary slide contact so as to pick up and/or transmit electric signals from and to the detection device in a sliding connection.
- 52. (New) The bending press as claimed in claim 51, wherein the slide contact is connected to the control device.
- 53. (New) The bending press as claimed in claim 51, wherein contact is made with the conductor track from a top face of the transport element.
- 54. (New) The bending press as claimed in claim 28, wherein the displacement mechanism has a spindle drive on which the detection device is mounted and is displaceable in two directions along the tool length by a reversible rotating motion of a threaded spindle of the spindle drive.